REMARKS

Status Summary

Claims 1-6 are pending in the present application, and claims 7-12 have been canceled. Claims 1-6 presently stand rejected. Claim 3 is now canceled, and claims 1 and 4 are amended by the present amendment. No new matter has been introduced by the present amendment. Reconsideration of the application as amended and based on the remarks set forth hereinbelow is respectfully requested.

Claim Rejection - 35 U.S.C. § 103

Claims 1-5 stand rejected by the Examiner under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Application Pub. No. 2003/0128751 to Vandenameele-Lepla, hereinafter referred to as "Lepla", in view of U.S. Patent No. 6,674,820 to Hui et al., hereinafter referred to as "Hui", and the admitted prior art. In addition, claim 6 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Lepla in view of Hui and the admitted prior art, and further in view of U.S. Patent No. 6,122,703 to Nasserbakht, hereinafter referred to as "Nasserbakht". The positions of the Examiner as summarized above with respect to claims 1-6 are respectfully traversed as described below.

Claim 1 has been amended as indicated above to recite that the memory is programmable via an interface connected to the memory though a plurality of internal data lines. Support for this feature can be found in the specification as originally

filed, for example in original claim 3; at page 6, line 36, through page 7, line 1; and in Figures 3 to 5.

Regarding claim 3, the Examiner contends that the prior art discloses that the memory cab be programmed via an interface, citing page 6, paragraph [0051], of Lepla. Specifically, the Examiner notes that Lepla discloses that the noise power spectrum may be measured off-chip and values for the carrier dependent weights programmed into weight source **310**. It is respectfully submitted, however, that the cited portion of Lepla discloses that "numerous techniques for estimating a noise power spectrum are known in the art, and any such technique may be employed in weight source **310**. For instance, in embodiments where the frequency-dependent noise is dominated by noise within the receiver electronics, the noise power spectrum may be measured off-chip and values for carrier-dependent weight w_k programmed into weight source **310**." Lepla is silent regarding specifically how the carrier-dependent weight is programmed into the weight source, with respect to both the programming methods and the hardware used to facilitate such programming. Accordingly, it is respectfully submitted that Lepla does not discuss the specific features originally recited in original claim 3 that have been incorporated into claim 1, in which the memory can be programmed via an interface.

In addition, it is further respectfully submitted that none of the remaining references can remedy this deficiency of Lepla. In particular, Hui discloses that a receiver device includes an auto-correlation memory **420** coupled to the channel estimator **415**. (See, e.g., Hui, Figure 4) The channel estimator **415** generates the

channel coefficients $c(k)$ and provides these channel coefficients to an equalizer **405** utilizing a plurality of candidate auto-correlations obtained from the auto-correlation memory **420**. It is respectfully submitted that although the memory of Hui might be interpreted as a memory storing a plurality of weighting coefficient sets as is recited in claim 1, since Hui fails to provide further connectivity information regarding the memory, the auto-correlation memory of Hui does not anticipate the feature that "the memory is programmable via an interface connected to said memory though a plurality of internal data lines." Regarding the admitted prior art, it is respectfully submitted that the disclosure made in the specification, pages 2 and 3, and in Figure 2 is also silent regarding a memory storing a plurality of weighting coefficient sets of claim 1, "wherein the memory is programmable via an interface connected to said memory though a plurality of internal data lines." Finally, Nasserbakht is directed to a generalized Fourier transform processing system, and thus Nasserbakht likewise fails to teach or suggest this feature.

As a result, it is respectfully submitted that Lepla, taken either alone or in combination with one ore more of Hui, Nasserbakht, and the admitted prior art, fails to teach or suggest every element of the weighting circuit of independent claim 1. Accordingly, it is respectfully requested that the rejection of claim 1 under 35 U.S.C. § 103(a) be withdrawn and the claim allowed at this time. In addition, claims 2 and 4-6 depend upon claim 1. Accordingly, it is respectfully submitted that the above remarks apply equally to these claims, and therefore the rejections of claims 2 and 4-6 should likewise be withdrawn and the claims allowed at this time. Finally, claim 3 is

canceled as indicated above, the subject matter of this claim having been incorporated into claim 1.

Serial No.: 10/566,531

CONCLUSION

In light of the above amendments and remarks, it is respectfully submitted that the present application is now in proper condition for allowance, and an early notice to such effect is earnestly solicited.

If any small matter should remain outstanding after the Patent Examiner has had an opportunity to review the above Remarks, the Patent Examiner is respectfully requested to telephone the undersigned patent attorney in order to resolve these matters and avoid the issuance of another Official Action.
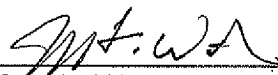
DEPOSIT ACCOUNT

The Commissioner is hereby authorized to charge any fees associated with the filing of this correspondence to Deposit Account No. 50-0426.

Respectfully submitted,

JENKINS, WILSON, TAYLOR & HUNT, P.A.

Date: __March 23, 2010__   By: _____

Jeffrey L. Wilson
Registration No. 36,058

Customer No: 25297

1406/324   JLW/BJA/gwc